UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

IN THE MATTER OF:

Kennecott Utah Copper LLC

Notices of Violation and Orders

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER OF CONSENT

Docket Nos. UGW14-02, UGW14-07. UGW14-12, UGW16-04, and Additional Release Events

I. JURISDICTION AND PARTIES

- 1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into pursuant to the authority vested in the Director of the Utah Division of Water Quality ("Director") in accordance with the Utah Water Quality Act ("ACT") including Sections 19-5-106, 19-5-107, 19-5-111 and 19-5-115, Utah Code Annotated ("UCA"), and in accordance with the Utah Administrative Procedures Act, UCA Sections 63G-4-101, et seq.
- 2. This Settlement Agreement is made and entered into by the Director, subject to approval by the Utah Water Quality Board (the "Board"), and Kennecott Utah Copper LLC ("Rio Tinto Kennecott Copper" or "RTKC"). The Director and RTKC are collectively referred to as "the Parties."
- 3. This Settlement Agreement relates to releases from RTKC's tailing and process water pipelines and certain other facilities associated with RTKC's operations.
- 4. Pursuant to Utah Code Ann. Section 19-5-104(3)(h), the Board must review and approve or disapprove, any settlement negotiated by the director in accordance with Subsection 19-5-106(2)(k) that requires a civil penalty of \$25,000 or more. This Settlement Agreement

includes a civil penalty in excess of \$25,000 and therefore must be presented to, reviewed by, and approved or disapproved by the Board.

- 5. UCA § 19-5-102(23)(a) defines waters of the State as "all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state."
- 6. UCA § 19-5-107(3)(a) states: "It is unlawful for any person, without first securing a permit from the director, to make any discharge [] not authorized under an existing valid discharge permit."
- 7. UAC R317-6-6.2.A states: "Except as provided in R317-6-6.2.C, the following facilities are considered to be permitted by rule and are not required to obtain a discharge permit under R317-6-6.1...20. Pipelines and above-ground storage tanks."
- 8. UAC R317-6-6.2.C states: "The submission of an application for a ground water discharge permit may be required by the Director for any discharge permitted by rule under R317-6-6.2 if it is determined that the discharge may be causing or is likely to cause increases above the ground water quality standards or applicable class TDS limits under R317-6-3 or otherwise is interfering or may interfere with probable future beneficial use of the ground water."
- 9. The Director and RTKC recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by RTKC in accordance with this Settlement Agreement do not constitute an admission of any liability. RTKC does not admit, and retains the right to controvert in any subsequent proceedings, other than proceedings to implement or enforce this Settlement Agreement, the validity of the facts and conclusions of law

and determinations in Sections II (Facts) and III (Director's Determination) of this Settlement Agreement.

II. FACTS

- 10. RTKC operates a copper ore concentrating facility ("Copperton Concentrator") north of the town of Copperton in southwest Salt Lake County. The Copperton Concentrator uses a grinding and flotation process to concentrate copper ore. Waste material from this process, known as tailings, is conveyed in slurry form via a pipeline from the Copperton Concentrator north to RTKC operations near Magna, Utah, where the tailings are deposited in the north tailings impoundment.
- 11. As part of its operations, RTKC operates two Copperton Concentrator tailings pipelines described as the "48-inch" and "60-inch" pipelines (collectively the "tailings pipelines") in what is considered the "Copperton Concentrator Pipeline Corridor." Consistent with a previous settlement agreement between the Parties (Docket No. UGW13-02, dated January 11, 2016), RTKC has been issued a renewal and modification of the Copperton Ground Water Discharge Permit UGW350017 on December 29, 2017, to cover the tailings pipelines ("Amended Permit").
- system. The process water system recovers water from permitted operations, including the RTKC Tailings Impoundment and Smelter. The process water is conveyed in pipelines from RTKC operations near the Great Salt Lake to the area of the Power Plant and Magna Reservoir and then south to the Copperton Concentrator. RTKC has other Ground Water Discharge Permits for its operations including for the Tailings Impoundment (UGW 350011), Smelter (UGW 350008) and the Power Plant/Magna Reservoir (UGW 350015). Prior to the effective date of the

Amended Permit, the pipelines associated with these facilities have been considered as permitted by rule under Utah Admin. Code Rule R317-6-6.2.A.20. However, as documented in the January 2016 Stipulation and Consent Order, Docket No. UGW13-02, the Director and RTKC agreed that RTKC's tailings pipelines and other mutually agreeable pipeline facilities, will hereafter be covered under the Amended Permit. The Amended Permit was issued on December 29, 2017.

- 13. The process water return system extends from the Magna Reservoir to the Copperton Concentrator. The system consists of Pump Stations 3A and 3B, approximately 12 miles of 48-inch diameter steel with concrete reinforced pipeline, and associated infrastructure. Pump Station 3B is a booster station that is located mid-line and incorporates a concrete surge basin to buffer pump operations and process upsets as well as provide adequate suction head pressure to booster pumps. RTKC has also agreed to cover the process water return system under the Amended Permit.
- 14. The Director issued NOV 14-02 for a July 15, 2013 release of an estimated 317,504 gallons of process water from a pipeline vent box in the process water line near the Power Plant. The upset flow was routed into the on-site storm water management system and retained within a storm water basin.
- 15. The Director issued NOV 14-07 for a September 13, 2013 release of an unknown quantity of tailings slurry from drop boxes H1A and A.25 within the Copperton Concentrator Pipeline Corridor and associated with a severe storm event.
- 16. The Director issued NOV 14-12 for an April 27, 2014 non-contact water leak of an unknown quantity from a pipeline located on the west side of the Copperton Concentrator tailings lines in the vicinity of drop box H1A.

- 17. The Director issued NOV 16-04 for a September 26, 2016 breach of a storm water detention basin by a construction contractor resulting in the release of an estimated 138,000 gallons of retained meteoric water which remained on site and of which RTKC recovered a portion by vacuum truck.
- 18. The Notices of Violation specified in paragraphs 14-17 above will be referred to herein as the "NOVs."
- 19. The Director has not issued NOVs for the following six additional release events which have been assigned release identification numbers ("Additional Release Events"):
 - a. On June 3, 2014, there was a release of at least 180,000 gallons of process water from a pipeline up-gradient of the Copperton Concentrator (UGW14-13);
 - b. On November 8, 2014, there was a release of a reported 100,000 gallons of process water from the Pump Station 3B surge basin (UGW15-03);
 - On November 19, 2014, there was a release of a reported 30,000 gallons of process water (related to contractor error) from a pipeline in the vicinity of Pump Station No. 4 (referred to as T06) (UGW15-01);
 - d. On November 24, 2014, there was a release of a reported 432,000 gallons of process water from piping at the Smelter's west process water ponds (UGW15-01);
 - e. On October 21, 2015, there was a release of a reported 900,000 gallons of process water due to a malfunction of the level sensors in the Concentrator Process Water Reservoir (UGW15-07); and

f. On July 31, 2017, there was a release of a reported 250,000 gallons of process water from a failed nipple on a pipeline running from the Magna Reservoir to the power plant (UGW17-03).

III. DIRECTOR'S DETERMINATION

20. Based upon the Facts set forth above and the administrative record, the Director hereby concludes that the releases identified in the Facts constituted discharges not authorized under existing valid discharge permits in violation of Utah Code Ann. § 19-5-107(3)(a).

IV. SETTLEMENT AGREEMENT AND ORDER

- 21. The Parties have entered into this Settlement Agreement to address the issued NOVs and the Additional Release Events. The Parties now desire to resolve these matters without additional administrative proceedings except to the extent provided herein by entering into this Settlement Agreement. Based upon the Facts and Director's Determination set forth above, and in the administrative record, it is hereby Ordered and Agreed that RTKC shall comply with all provisions of this Settlement Agreement.
- 22. The Parties agree that the resolution of the NOVs and the Additional Release Events has been negotiated in good faith and that any enforcement action associated therewith is in the public interest, and that entry of this Settlement Agreement is an appropriate means to resolve the matters covered herein and allows for immediate assurance in protecting Waters of the State in the affected areas.
- 23. As to each of the NOVs and Additional Release Events, the Division has prepared a separate Penalty Calculation in accordance with the Penalty Criteria for Civil Settlement Negotiations, Utah Administrative Code R317-1-8 which considers such factors as the nature, severity and extent of the violations, history of compliance, degree of willfulness and/or

negligence and good faith efforts to comply. Based on the calculation worksheets, the Director has determined that the total penalty for all 10 releases is \$67,667.

- 24. Further, the Director has calculated a separate administrative cost for each release which totals \$21,380.
- 25. Within thirty (30) days of the Effective Date (as defined below), RTKC agrees as follows:
 - a. Pay to the State of Utah a civil penalty in the sum of \$67,667 by cash or check made payable to the State of Utah, delivered or mailed to the Division of Water Quality, Department of Environmental Quality, 195 North 1950 West, P.O. Box 144870, Salt Lake City, UT 84114-4870;
 Pay to the Utah Division of Water Quality Past Administrative Response Costs in the sum of \$21,380 by cash or check made payable to the State of Utah, delivered or mailed to the Division of Water Quality, Department of Environmental Quality, 195 North 1950 West, P.O. Box 144870, Salt Lake City, UT 84114-4870; and
 - Withdraw its Requests for Agency Action filed in response to certain of the
 NOVs (UGW 14-02, 16-04).

V. EFFECTIVENESS OF SETTLEMENT AGREEMENT AND RESERVATIONS

26. Final approval by the Director of this Settlement Agreement shall not occur until it is approved by the Board. The Effective Date shall be the date this Settlement Agreement is signed by the Director after it is formally approved by the Board. The Settlement Agreement will not be presented to the Board for final action until after the Division has provided public notice of the proposed Settlement Agreement and has solicited and reviewed any public comments

received. All public comments, and the Director's responses, shall be provided to the Board in connection with the Director's request for final action.

- 27. As of the Effective Date, this Settlement Agreement will be a final non-appealable administrative order subject to the civil enforcement provisions of UCA § 63G-4-501 and other applicable law including UCA § 19-5-115.
- 28. In response to the Issued NOVs and the Additional Release Events, RTKC has submitted information to the Director (the "Risk Analysis") indicating that the releases set forth in the Facts have a low probability of having impacted groundwater quality (as defined in paragraph 30). Yet, there currently exists limited groundwater quality data to validate RTKC's technical analysis as to the low likelihood of groundwater quality impacts. These data gaps will be filled through the monitoring well and contaminant investigation programs as described in the Amended Permit. The Amended Permit will govern the applicable requirements for contaminant investigation, corrective action, and monitoring.
- 29. Recognizing that it may require considerable time to complete the contaminant investigation requirements of the Amended Permit, in calculating the appropriate civil penalties discussed above, the Director has relied upon the assumptions and conclusions set forth in the Risk Analysis. As a result, the civil penalties assessed pursuant to this Settlement Agreement are based on the assumption that degradation of groundwater quality has not occurred as a result of the releases and events covered by this Settlement Agreement. In the event that the Division discovers in the future that the release events covered by this Settlement Agreement resulted in degradation of groundwater (as defined in paragraph 30), this Settlement Agreement shall not apply to such degradation and the Division may seek the imposition of additional civil penalties and may take other actions the Division deems appropriate to address such impacts. In such an

event, RTKC likewise reserves all applicable legal and factual defenses to such claims and actions that may be taken by the Division upon the discovery of an impact to groundwater quality. The reserved defenses include defenses to every element of any underlying claim and defenses to any penalty, including defenses contesting the existence of any alleged violation.

- 30. For purposes of determining impacts to ground water quality under paragraph 29, the Division will apply the protection levels established in R317-6-4.5B for class II aquifers, unless a specific aquifer is otherwise classified (as described in the Salt Lake Aquifer classification). Background concentration demonstrations shall follow the procedures outlined in R317-6-6.10.
- 31. The Parties intend that matters involving contaminant investigation and monitoring be addressed in the Amended Permit, except that the September 26, 2016 release (UGW16-04) is not covered under the Amended Permit. Therefore, the Parties agree that for this release, the RTKC shall:
 - Continue to monitor ECG1186, ECG1188, and ECG906 as required under permit UGW350010;
 - b. Monitor ECG1113A semi-annually as a compliance well, to include the 2018 sampling year; monitoring parameters shall be the same as listed in UGW350010. RTKC may request that ECG1113A be removed as a compliance well upon submission, for Director review and approval, of a report demonstrating that none of the above-mentioned monitoring wells have shown impacts from the September 26, 2016 release.
 - c. Submit to the Director for review and approval, a final version of the DWQ

 UGW16-04: Midas Drainage Embankment Breach; Follow-Up Regarding

Monitor Well Placement report dated January 18, 2018 within sixty (60) days of the Effective Date. The final report shall include the additions of a map illustrating ground water contours of the subject area, as well as time series charts for the dissolved metals cadmium, copper, and zinc.

- Except as specifically provided in this Settlement Agreement, this Settlement 32. Agreement resolves the Issued NOVs and the Additional Release Events, and releases RTKC from any and all liability and claims under the authority of the Director, the Board and the Division for civil penalties that may be sought by the Director, or past administrative or other response costs, that may have been incurred by the Director, arising from the Facts, the NOVs and the Additional Release Events. Nothing in this Settlement Agreement shall limit the power and authority of the Division or the State of Utah to take, direct, or order all actions necessary, in connection with future violations, to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual, potential, or threatened release of pollutants or contaminants to Waters of the State. Further, nothing in this Settlement Agreement shall prevent the Director or the Board from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as they deem appropriate and necessary in connection with future violations, or from requiring RTKC in the future to perform additional activities pursuant to the Act or any other applicable law in connection with future violations.
- 33. The Parties acknowledge that neither the Director nor the Board has jurisdiction regarding natural resource damage claims, causes of action, or demands. Therefore, such matters are outside the scope of this Settlement Agreement.

- 34. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to execute and legally bind the Parties to the same.
 - 35. This Settlement Agreement may be amended in writing if signed by both Parties.

[SIGNATURE PAGE FOLLOWS]

IT IS SO AGREED AND ORDERED:

Lisa A. Kirschner

Attorney for Kennecott Utah Copper LLC

FOR THE UTAH DIVISION OF WATER QUALITY	
By: Erica Brown Gaddis, PhD Director	
Date:	
FOR KENNECOTT UTAH COPPER LLC	
By: Marc Caneral Title: Managing Disector, R7/2C Date: San 31 st /2018	APPROVED AS TO FORM REQUINTS/KUC LEGAL By: Nicole Squires Corporate Counsel Date: 174, 26, 2016
Approved as to form:	
Paul M. McConkie Assistant Attorney General	
Lisa a. Wischner	